

US EPA ARCHIVE DOCUMENT

U.S. EPA STATEMENT OF BASIS

for

Proposed Industrial and Commercial Reuse

at

The Former Allison Transmission Plant 2

**4500 West Gilman Street
Speedway, Indiana**

IND 000 806 828

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Statement of Basis

Former Allison Transmission Plant 2
4500 West Gilman Street
Speedway, Indiana
EPA I.D. Number IND 000 806 828

INTRODUCTION

This Statement of Basis (SB) for the former Allison Transmission Plant 2, owned by the Speedway Redevelopment Commission (SRC) explains the Environmental Protection Agency's (EPA's) proposal to take no further action at the site and to release the parcel for commercial and industrial redevelopment. EPA will make a final decision on this parcel only after the public comment period has ended and the information submitted during this time has been reviewed and considered. As such, EPA is issuing this SB as part of its public participation responsibilities under the Resource Conservation and Recovery Act (RCRA).

This document summarizes information that can be found in greater detail in the following documents: *Description of Current Conditions*, dated February 8, 2005; the *RCRA Facility Investigation (RFI) Report (and Risk Assessment)*, dated March 31, 2009; the *RCRA Corrective Action Corrective Measures Proposal*, dated December 12, 2011; the *RCRA Corrective Measures Proposal, Former Allison Transmission Plant 2*, dated April 12, 2013, and other documents contained in the administrative record for the Allison Transmission facility.

EPA notes that the descriptions, investigation results, conclusions drawn and proposed decision presented in this SB do not pertain to the active Allison Transmission facility (Plants 3, 6, 7, 12 and 14), which is located immediately south of the former Plant 2, at 4700 West 10th Street, Speedway, Indiana (Figure 1). This active facility is under a different ownership and has a separate EPA I.D. Number (IND 006 413 348) and to allow for release of the Plant 2 property this active facility is being considered separately. EPA will evaluate and render a decision for the active facility at a later date.

EPA may modify this proposed decision or make another decision based on new information or public comments. Therefore, the public is encouraged to review and comment on this decision. The public can be involved in this process by reviewing the documents contained in the administrative record file and by submitting comments to EPA during the public comment period set for , to , 2014.

PROPOSED REMEDY

EPA proposes no further remediation for the former Plant 2 parcel, that the existing ground water monitoring continue and institutional controls previously established remain in place.. Future land use for residential or agricultural purposes will not be allowed under this determination. If a change in types of land use is proposed, EPA must be consulted, and a corresponding change in remedy would be required.

The soil of the former Plant 2 parcel was impacted by industrial contaminants, known under the RCRA program as hazardous constituents. These contaminants include semivolatile organic compounds (SVOCs), petroleum products and metals. However, this contamination has been removed to concentrations which present a cumulative site-related cancer risk (CSCR) of 1×10^{-4} (i.e., one in 10,000) and a non-cancer hazard index (HI) of less than 1. Approximately 3,198 tons of contaminated soil were removed to meet these cleanup criteria. A summary of the hazardous constituents and their concentrations is presented below under the Interim Measures Taken section.

Localized areas of contamination (SVOCs, chlorinated volatile organic compounds (VOCs) and metals) have been detected in soil and ground water at the former Plant 2 parcel. However, sampling and analysis of the ground water indicates that concentrations of the hazardous constituents decrease to non-detect within one hundred feet from the points of detection. Future mobilization of hazardous constituents is expected to be minimal because soil contaminated by the hazardous constituents above screening criteria listed below in this SB was removed, and because the parcel has been exposed to precipitation since the Plant 2 structures were removed in 2004 and no increases of contaminant concentrations have been observed. Nonetheless, General Motors, LLC (GM) will continue to monitor the ground water at the downgradient (southern) margin of the Plant 2 parcel and GM will perform further investigation and possible corrective action if contamination is detected above screening criteria at this boundary.

Area-wide ground water monitoring indicates that there are one or more off-site sources of chlorinated VOC contamination, to the immediate north, which is migrating onto the former Plant 2 parcel, and is migrating off-site beyond the southern property boundary. The Indiana Department of Environmental Management (IDEM) is investigating this source area.

For the former Plant 2 parcel, EPA has determined that, given the existing conditions, the potential risk of indoor vapor intrusion from the hazardous constituents is low and acceptable for commercial/industrial reuse of the property.

Restrictive covenants have been placed on the property deed which ensure that: (1) all future structures on the parcel will be evaluated for vapor intrusion and/or will be equipped with vapor mitigation systems; (2) the property will not be used for residential or agricultural purposes; (3) any excavated soils will be managed safely to prevent exposure to contaminants; (4) ground water will not be used for any potable purpose; (5) no activity on the property will interfere with the ground water monitoring network; (6) a crushed rock barrier over an area of buried demolition debris will be maintained; (7) EPA, IDEM and General Motors shall have access rights for purposes of corrective action, and (8) these restrictive covenants for the property are permanent, i.e., to “run with the land”.

FACILITY BACKGROUND

Location and Manufacturing History

The former Allison Transmission Plant 2 is located on an approximately 20 acre parcel of land at 4500 West Gilman Street, Speedway, Indiana (Figure 1). The original portion of Plant 2 was constructed in 1936. The Allison Transmission (AT) Division of General Motors Corporation (GMC) conducted various operations at the site including aircraft engine testing, machining of metal parts, parts cleaning, and warehousing. These operations are known to involve plating, degreasing, and generation of metal cuttings. Renovations and expansions of the facility occurred over subsequent years. Wastes that were generated included metal and cyanide wastes from plating operations, spent chlorinated VOCs from degreasing, petroleum wastes (e.g., cutting oils, transmission fluid and fuels), coolants, metal chips and general refuse. Plant 2 was designated as a Large Quantity Generator by EPA. Manufacturing at the facility was phased out in the mid-1990's. Most structures on the site were demolished in 2004. Currently, a fire control pump house, an above ground water tank and a power substation are the only structures remaining on site.

The former Plant 2 parcel is bounded by industrial property to the north; a former railroad right-of-way, industrial property and 10th Street to the south; Main Street to the west (beyond which are commercial/retail facilities and residences); and a railroad right-of-way, industrial property and lime piles, Polco Street, and Dry Run Creek to the east (Figure 1). Residential properties are located within one quarter mile to the west of the Plant 2 parcel.

On April 27, 2005, EPA and GMC entered into a Performance Based Corrective Action Agreement (PBCAA) addressing the entire AT facility, to investigate and remediate releases of hazardous wastes and constituents. In order to facilitate redevelopment of the former Plant 2 parcel, EPA proposes to address this parcel separately from any future actions proposed for the active Allison Transmission facility and its constituent plants.

In August 2007, GM sold the entire facility to the Clutch Operating Company, which retained the name Allison Transmission. On March 4, 2011, the Clutch Operating Company sold the former Plant 2 parcel to the Speedway Redevelopment Commission (SRC). Under the terms of the property transfer, GM will oversee the completion of RCRA corrective action obligations at the facility.

Site Geology and Hydrogeology

The area of the former Plant 2 parcel is relatively flat and slopes gently to the southwest. Underlying soil is primarily sand and gravel with intermittent beds of silt and clay, approximately 140 feet thick, overlying shale bedrock. The water table is 25 to 30 feet below ground surface. Ground water flow is primarily to the south, toward Plant 3.

Ecological Setting

The former Plant 2 parcel is a flat vacant property with an extensive history of industrial use. It is bounded by parking lots, heavy to light industrial/commercial properties, lime sludge piles and thoroughfares. No ecologically significant habitat exists at or around the parcel.

Interim Measures Taken

During the decommissioning of Plant 2, GM voluntarily removed industrial wastes and waste management units from the site, in order to reduce potential human exposure to hazardous constituents to levels suitable for industrial/commercial reuse of the property. In 2009, GM excavated soil contaminated with mercury above screening levels at underground storage tank (UST) Area A. Approximately 46.6 tons of contaminated soil were removed off-site. Between 1988 and 2000, GMC removed USTs along with waste sumps, "hot wells" (storage vaults) and above-ground storage tanks. All of these units contained either raw materials or process wastes. No regulated USTs remain on the site.

During its removal of the USTs and sumps, GM sampled and analyzed the remaining soil. Because contaminant concentrations at the former UST Area E, the former Tin Plating Area and the former Process Waste Sump (with the exception of arsenic concentration in one sample from the former UST Area E) did not exceed the screening levels listed in Table 2, GMC did not sample ground water beneath these areas. Concentrations of hazardous constituents detected in the soil and ground water for all areas during the UST removals are listed below in Table 1:

Table 1: Concentrations of Hazardous Constituents Detected Before Interim Measures

Area	Contaminant	Maximum Concentration In Soil (mg/kg) *	Maximum Concentration In Ground Water (mg/L) *
UST Area A	Arsenic	32.1	0.068
	Barium	159	0.4
	Lead	86.5	0.1
	Benzo(a)pyrene	3.9	<0.01
	Mercury	28.1	<0.001
UST Area B	Arsenic	132	0.033
	Lead	349	0.11
	Trichloroethene	28	<0.005
	Benzo(a)pyrene	5.2	<0.01
UST Area C	Arsenic	17.5	<0.005
	Barium	27.9	0.09
	Chromium	8.21	0.01
	Lead	34.5	<0.005
UST Area D	Arsenic	30.9	<0.05
	Barium	56.5	0.13
	Chromium	7.41	13.7
	Lead	58.4	<0.05
	Benzo(a)pyrene	2.5	0.0019
UST Area E	Arsenic	30.9	
	Barium	49.7	
	Chromium	9.36	
	Lead	56.6	
	Benzo(a)pyrene	2.4	
Tin Plater Area	Arsenic	7.65	
	Barium	50.2	
	Chromium	11.8	
	Lead	24	
	Benzo(b)fluoranthene	0.0062	
Former Degreaser Area	Trichloroethene	0.0073	
	1,1-dichloroethane	0.008	0.0034
	Cis-1,2-dichloroethene	0.01	0.0067
	1,1,1-trichloroethane	0.2	0.02
Piston Coolant Area	Trichloroethene	0.3	0.0003
	Benzo(a)pyrene	2.1	
Process Waste Sump	Trichloroethene	0.018	
	Lead	42	
	Benzo(a)pyrene	2.1	
UST Area 5	Indeno(1,2,3cd)pyrene	4.8	
	Trichloroethene	0.110	
	Tetrachloroethene	0.025	

*mg/kg = milligrams per kilogram

*mg/L = milligrams per liter

Soil throughout the site was analyzed for metals, VOCs and SVOCs. As described earlier in this SB, the cleanup objective for soils was a cumulative site-related cancer risk (CSCR) of 1×10^{-4} or lower, and a noncancer hazard index (HI) of 1 or less. The criteria for meeting these standards are the values listed in Table 2. GM removed approximately 3,198 tons of soil during the interim measures process to meet these cleanup objectives.

Ground water monitoring wells were installed across the site during 1986, 1987, 1994 and 1996 in order to delineate the extent of ground water contamination.

INVESTIGATION RESULTS

Under the Performance Based Corrective Action Agreement, GMC's contractors conducted a RCRA Facility Investigation (RFI) from 2006 through 2008. Process waste and raw materials were managed at various locations around the former Plant 2; these areas of contamination were designated as Areas of Interest (AOIs) (Figure 2). Soil and ground water at each AOI were sampled and analyzed to identify and delineate extent of contamination and to determine the level of risk to human health.

Areas of Interest

- AOI 2-1: Former UST Area A
- AOI 2-2: Former UST Area B
- AOI 2-3: Former UST Area C
- AOI 2-4: Former UST Area D
- AOI 2-5: Former UST Area E
- AOI 2-6: Piston Coolant Trenches and Building
- AOI 2-7: Former Degreaser Area
- AOI 2-8: Former Tin Plating Area
- AOI 2-9: Process Waste Sump
- AOI 2-10: Former UST Area 5

Screening Criteria

GM compared the soil characterization data with screening criteria derived from the risk-based preliminary remediation goals (PRGs) established by EPA for high-end exposure to workers in a commercial/industrial scenario. Site-specific criteria were also calculated for potential indoor air vapor intrusion risk via contaminated soil and ground water. Although there is no potential for potable use of ground water at the site, the levels of contamination on-site were compared with Federal drinking water Maximum Contaminant Levels (MCLs). For contaminants without MCLs, GM calculated site-specific drinking water criteria for a CSCR of 1×10^{-5} (one in 100,000) and HI of 1. The screening criteria are listed below in Table 2:

Table 2: RFI Screening Criteria for Soil and Ground Water

Contaminant	Soil PRG (mg/kg)	Soil Vapor Intrusion Criterion (mg/kg)	Ground Water Vapor Intrusion Criterion (mg/L)	Drinking Water Criterion (mg/L)
Arsenic	16			0.01
Barium	67,000			2.0
Cadmium	450			0.018
Chromium	2,500			10
Lead	800			0.015
Mercury	14			0.002
Silver	390			0.18
Benzene	14		5.7	0.005
Chloroethane	61,000			21
1,1-dichloroethene	1,100	79	210	0.007
Cis 1,2-dichloroethene	150	5.5	57	70
Tetrachloroethene	13	14	13	0.005
Trichloroethene	61	2.6	24	0.005
Vinyl Chloride	1.7		2.8	0.002
Xylenes	900	16	180	10
Benzo(a)anthracene	21	170,000	380	0.00092
Benzo(a)pyrene	2.1	200,000	170	0.0002
Benzo(b)fluoranthene	21	20,000	260	0.00092
Dibenz(a,h)anthracene	2.1	200,000,000	28,000	0.000092
2-methylnaphthalene	190	300	86	0.73
Napthalene	190	27	21	0.73

Potential Receptors

The risk assessment for the former Plant 2 parcel accounted for the following human exposures:

- On-site routine workers
- On-site maintenance workers
- Trespassers
- On-site construction workers
- On-site recreational visitors
- Off-site residents
- Off-site maintenance workers
- Off-site recreational visitors

GM identified AOIs at which the highest concentration of a contaminant found exceeded its criterion for soil or ground water. These AOIs were investigated and evaluated further in the RCRA Facility Investigation (RFI) and baseline Human Health Risk Assessment (BHHRA) as described below. All of the AOIs at the former Plant 2 parcel required further evaluation.

RCRA Facility Investigation

The RFI for the former Plant 2 parcel was conducted from 2006 to 2008. GM sampled soil and ground water at each AOI as necessary to determine contaminant concentrations and to delineate the extent of contamination. Data obtained from the RFI were used for exposure and risk calculations in the BHHRA.

The BHHRA evaluated the potential significance of reasonable maximum exposures from contaminated media under current and reasonably expected future land use at and around the facility. The methods which GM used to conduct the BHHRA were based upon EPA risk assessment guidance. The results were used to identify if and where a release of hazardous constituents at an AOI may cause reasonable maximum exposures to be significant enough to warrant corrective measures.

As exceedances of human health based action criteria were found, GM identified Interim Measures (IMs) to address the relevant AOI. These AOI and the IMs taken by GM are listed in Table 3, below:

Table 3: AOIs and Interim Measures Taken

AOI	Interim Measures Taken
2-1	Demolition of building and removal of process units. Excavation and removal of most contaminated soil. Post-excavation sampling of remaining soil.
2-2	Demolition of building and removal of process units. Excavation and removal of most contaminated soil. Post-excavation sampling of remaining soil.
2-3	Demolition of building and removal of process units. Excavation and removal of most contaminated soil. Post-excavation sampling of remaining soil.
2-4	Demolition of building and removal of process units. Excavation and removal of most contaminated soil. Post-excavation sampling of remaining soil.
2-5	Demolition of building and removal of process units. Excavation and removal of most contaminated soil. Post-excavation sampling of remaining soil.
2-6	Demolition of building and removal of process units. Excavation and removal of most contaminated soil. Post-excavation sampling of remaining soil.
2-7	Demolition of building and removal of process units. Excavation and removal of most contaminated soil. Post-excavation sampling of remaining soil.
2-8	Demolition of building and removal of process units. Excavation and removal of contaminated soil. Post-excavation sampling of remaining soil.
2-9	Demolition of building and removal of process units. Excavation and removal of contaminated soil. Post-excavation sampling of remaining soil.
2-10	Demolition of building and removal of process units. Excavation and removal of contaminated soil. Post-excavation sampling of remaining soil.

There is an area with debris found beneath the ground surface near AOI 2-2. This was a wing of the former Plant 2 building known as “Basic Facilities A” which had been a powerhouse containing steam compressors for generating electricity. During GM’s investigation of AOI 2-2, soil borings and test pits revealed the basement of this former building which is filled with concrete chunks, brick, wood and asphalt from demolition of the overlying structure. The basement floor had been broken into fragments. Analysis of the debris showed portions of it to be contaminated with SVOCs above screening criteria, possibly from coal ash residue. The size of this area is approximately 21,125 square feet. Restrictive covenants require maintenance of an existing protective surface cover of at least 6” of clean gravel over this location, which is called the “Engineering Control Area” illustrated in Figure 3.

The RFI indicated concentrations of contaminants (after interim measures were performed) at each AOI as described in Table 4 below:

Table 4: Concentrations of Contaminants at AOIs as Indicated by the RFI

AOI	Contaminant	Soil Maximum Detected (mg/kg)	Ground Water Maximum Detected (mg/L)	Exceeds Criteria Listed in Table 2?	Comments
2-1	Tetrachloroethene	0.018	0.77	no	Soil with mercury exceedance removed off-site.
	Trichloroethene	1.5		no	
	Benzo(a)anthracene	3.7		no	
	Benzo(a)pyrene	5.3	0.068	no	Off-site source of ground water contamination.
	Arsenic	13		no	
	Barium	159	0.4	no	Ground water contamination lies within site boundary and will be monitored.
	Chromium	48.5	2	no	
	Lead	126	0.1	yes(gnd wtr)	
	Mercury	28.1		yes(soil)	
	Cis 1,2-dichloroethene		0.2	no	
	Vinyl chloride		0.037	yes(gnd wtr)	Institutional controls will prevent exposure to soil and ground water contamination.
2-2	Trichloroethene	0.099	0.033	no	Most soil samples were below criteria.
	Benzo(a)anthracene	143		yes(soil)	
	Benzo(a)pyrene	100		no	
	Benzo(b)fluoranthene	143		no	Institutional controls will prevent exposure to soil and ground water contamination.
	Dibenz(a,h)anthracene	160		no	
	2-methylnapthalene	4.28		no	
	Napthalene	6.3		no	Off-site source of ground water contamination.
	Arsenic	36.4		yes(soil,g.w.)	
	Barium	69.4		no	
	Chromium	46		no	Ground water contamination lies within site boundary and will be monitored.
	Lead	123		yes(gnd wtr)	
	Mercury	4.98		no	
	Vinyl chloride		0.35	yes(gnd wtr)	
2-3	Arsenic	17.5	0.09	yes (soil)	Institutional controls will prevent exposure to soil and ground water contamination.
	Barium	27.9		no	
	Chromium	6.45		no	
	Lead	28.4		no	

Table 4, continued

AOI	Contaminant	Soil Maximum Detected (mg/kg)	Ground Water Maximum Detected (mg/L)	Exceeds Criteria Listed in Table 2?	Comments
2-4	Benzene	0.009	2.20	yes(gnd wtr)	Most soil samples were below criteria.
	Trichloroethene	0.047		no	
	Xylenes	1.36		no	
	Vinyl chloride		0.01	no	Institutional controls will prevent exposure to soil and ground water contamination.
	Benzo(a)anthracene	2.80	0.002	no	
	Benzo(a)pyrene	2.50	0.002	yes (soil)	
	Benzo(b)fluoranthene	4.00		no	Ground water contamination lies within site boundary and will be monitored.
	Dibenz(a,h)anthracene	0.67	0.0006	no	
	Napthalene	1.8		no	
	Arsenic	30.9	0.029	yes(soil,g.w.)	
	Barium	141	0.132	no	
	Chromium	17.1		no	
	Lead	481	0.01	yes (soil)	
	Mercury	6.75		no	
2-5	Arsenic	30.9		yes (soil)	Most soil samples were below criteria.
	Barium	59		no	
	Chromium	12.1		no	
	Lead	65.7		no	Institutional controls will prevent exposure to soil contamination.
	Mercury	1.61		no	
	Silver	4.09		no	
2-6	Trichloroethene	0.018	0.0366	yes(gnd wtr)	Ground water contamination lies within site boundary and will be monitored.
	Xylenes	0.0175		no	
	Vinyl chloride		0.25	yes(gnd wtr)	
	Benzo(a)anthracene	0.44		no	Institutional controls will prevent exposure to ground water contamination.
	Benzo(a)pyrene	2.1		no	
	Benzo(b)fluoranthene	1.7		no	
	Dibenz(a,h)anthracene	0.57		no	
	Napthalene	0.048		no	
	1,1-dichloroethene			no	
	cis 1,2-dichloroethene		0.57	no	
	Barium		0.09	no	

Table 4, continued

AOI	Contaminant	Soil Maximum Detected (mg/kg)	Ground Water Maximum Detected (mg/L)	Exceeds Criteria Listed in Table 2?	Comments
2-7	cis 1,2-dichloroethene	0.012	0.067	no	Ground water contamination lies within site boundary and will be monitored. Institutional controls will prevent exposure to ground water contamination.
	Tetrachloroethene	0.021		no	
	Trichloroethene	0.31	0.0039	no	
	Xylenes	0.0165		no	
	Vinyl chloride		0.059	yes(gnd wtr)	
	Barium		0.08	no	
2-8	Trichloroethene	0.0073		no	
	Benzo(b)fluoranthene	0.0062		no	
	Arsenic	7.65		no	
	Barium	50.2		no	
	Chromium	11.8		no	
	Lead	24		no	
2-9	Benzo(a)anthracene	2.4		no	
	Benzo(b)pyrene	2.1		no	
	Benzo(b)fluoranthene	1.5		no	
	Dibenz(a,h)anthracene	0.47		no	
	Arsenic	7.41		no	
	Barium	76.8		no	
	Chromium	10.9		no	
	Lead	49		no	
2-10	Tetrachloroethene	0.025	0.0053	no	
	Trichloroethene	0.11	0.028	no	
	Xylenes	0.0066	0.0051	no	
	Benzo(a)anthracene	0.0025	0.0025	no	
	Benzo(a)pyrene	0.017	0.017	no	
	Benzo(b)fluoranthene	0.02	0.0074	no	
	Napthalene	0.012	0.0082	no	

SUMMARY OF FACILITY RISKS

Potential Risks to Human Health

Former Plant 2 is a vacant parcel; partial concrete floor slabs cover some of the area, and the remainder of the land is covered either by asphalt or gravel. Public access to the parcel is limited by fencing and warning signs. Redevelopment at the former Plant 2 is planned as part of a commercial revitalization project; therefore, potential receptors in the future could include construction workers involved with site redevelopment, routine workers during post-redevelopment use of the site and maintenance workers conducting occasional post-redevelopment construction or maintenance (e.g., during installation or repair of underground utilities, or during removal or repair of pavement).

The potential for off-site residents to be exposed to contaminants transported by ground water from the former Plant 2 is negligible because the direction of ground water flow is southward, i.e., toward 10th Street and the active portion of the Allison Transmission facility. Ground water contamination has been identified beneath many of the AOIs; however, the contaminant concentrations decrease to drinking water standards or non-detect with distance from each AOI, and within the boundaries of the parcel. Nearly all of the soil at AOIs 2-1 through 2-7 which was contaminated above the screening criteria listed in Table 2 has been removed. All soil that was contaminated above the screening criteria has been removed at AOIs 2-8 through 2-10. Restrictive covenants have been placed in the property deed to prevent human exposure to contaminated soil. These covenants also prohibit potable use of ground water at the property. Increases of contaminant concentrations have not been observed in monitored plumes, and future mobilization of remaining contamination from each AOI is expected to be minimal. GM will continue to monitor the ground water at the downgradient (southern) margin of the Plant 2 parcel, and will perform further investigation and possible corrective action if contamination is detected above screening criteria at this boundary.

At present, the Marion County Health Department (MCHD) is considering the establishment of a “No Well Zone” which would encompass the former Plant 2 parcel and the active portion of the AT facility. This action would prohibit the installation of any new well for extraction of ground water unless allowed by the MCHD. An existing 714 acre No Well Zone borders the eastern boundary of the former Plant 2 parcel. This established protective zone would be augmented by the proposed addition. The inclusion of the former Plant 2 parcel in a No Well Zone, while not a formal part of EPA’s selected remedy for this site, would provide an additional institutional control to protect human health and the environment.

Potential exists for off-site residents and workers to be exposed to soil contaminated above screening criteria via wind-blown dust generated by excavation during construction or maintenance activities breaching the pavement at the former Plant 2. However, the restrictive covenants which are attached to the property deed include a Soil Management Plan which requires management of excavated soil and debris in a manner that does not endanger human health or the environment. Such management requires dust suppression measures when weather conditions may cause blowing and scattering of the material. The restrictive covenants also require the owner/operator to notify EPA or IDEM in writing before the start of any operation that will disturb the soil at the former Plant 2.

Potential Ecological Risk

The former Plant 2 parcel is a flat vacant property with an extensive history of industrial use. It is bounded by parking lots, heavy to light industrial/commercial properties, lime sludge piles and thoroughfares. No ecologically significant habitat exists at or around the parcel.

SCOPE OF CORRECTIVE ACTION

Final corrective measures for the former Plant 2 parcel must ensure:

1. Soil and ground water contamination on-site will not endanger human health.
2. Contamination will not migrate off-site, such as by transport in ground water or airborne fugitive dust.
3. Workers who will occupy proposed buildings on-site will not be exposed to vapors from VOCs at concentrations which can endanger human health.
4. Institutional and engineered controls to protect human health and the environment will be recorded as restrictive covenants in the property deed, and will be binding on all future owners of the former Plant 2 parcel.

PREVIOUS CLEANUP EFFORTS

As summarized under the “Interim Measures Taken” section of this SB, GMC has removed contaminated media from the site to concentrations at which the BHHRA has determined to be protective of human health and the environment, and, combined with restrictive covenants that have been recorded in the property deed, render the former Plant 2 parcel suitable for industrial/commercial reuse.

SUMMARY OF REMEDY COMPONENTS

Based upon conditions at the Former Allison Transmission Plant 2 the EPA has selected the following remedy components to protect human health at and around the Facility:

Facility Wide

The contamination at the site must be remediated to a level appropriate for continued industrial use. Certain engineered barriers, such as pavement, foundations and gravel covers, are used to limit contact and risk from remaining contamination. The property deed includes restrictive covenants which protect human health and the environment by:

1. Prohibiting the extraction of on-site ground water for any purpose other than implementing corrective action activities;
2. Ensuring that any new construction activities at the site will include assessment and management of indoor air vapor intrusion risk;
3. Ensuring that any soil displaced during excavation and construction activities will be analyzed and managed to prevent risk to human health and the environment;
4. Ensuring that future use of the property will remain industrial/commercial, and not for agricultural or residential purposes, and
5. Ensuring that the “Engineering Control Area” gravel cover will be maintained at AOI 2-2, as described below.

The EPA proposes that these restrictive covenants be maintained as part of the final remedy for the site and must remain with the deed as long as contaminants remain at the site at industrial levels.

Soil

Based on information found in the *Description of Current Conditions* that was generated by GMC, it was determined that no further action was required for AOI 2-9, and the BHHRA in the *RCRA Facility Investigation Report* provided evidence that corrective measures were not warranted for AOIs 2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, 2-8 and 2-10.

A soil management plan will be attached to the property deed, to address the location of the Engineering Control Area at AOI 2-2. This plan will require maintenance of at least 6" of clean gravel cover over the location and will specify that any material excavated from the location will be disposed off-site or promptly replaced in the excavation.

Ground Water

Ground water contamination data for the entire facility, collected by GMC before conducting the RFI, was summarized in the *Description of Current Conditions* which is found in the Administrative Record for EPA's proposed decision. During the RFI, GMC focused its investigation on AOIs where impacts to ground water were suspected. The ground water analytical results were compared to drinking water criteria. The RFI determined that residual VOC contamination at the AOIs was not contributing to ground water contamination which was identified as coming from off-site sources.

GMC conducted the BHHRA as part of the RFI to evaluate potential exposures (i.e., potable, direct contact, and indoor air vapor intrusion) to ground water assuming the existing use restrictions remain in perpetuity. The BHHRA determined that no potential significant exposures to ground water exist under current and reasonably expected future land use at the facility.

EPA proposes that ninety days after EPA issues its Notification of Final Decision on the remedy, GM will submit to EPA its plan for annual monitoring ground water at the upgradient and downgradient boundaries of the former Plant 2 parcel. GM will determine whether the contaminant concentrations remain consistent with the conclusions of the BHHRA. GM will submit its annual ground water monitoring reports to EPA by March 15 of each subsequent year.

GM will request that the Marion County Health Department adopt a No Well Zone for the former Plant 2 parcel and surrounding area. Similar No Well Zones have been adopted in the general area of the facility. No new ground water wells may be installed in these zones without approval of the Marion County Health Department.

The restrictive covenants recorded in the property deed prohibit any potable use of ground water within the property. No wells may be installed on-site for any purpose other than corrective action without permission from IDEM.

CRITERIA FOR EVALUATION OF THE PROPOSED REMEDY

EPA evaluates proposed corrective measures by using the following criteria:

1. Overall protection of human health and the environment
2. Attainment of media cleanup standards
3. Controlling the sources of releases
4. Compliance with waste management standards
5. Long-term reliability and effectiveness
6. Reduction of toxicity, mobility or volume of wastes
7. Short-term effectiveness
8. Implementability
9. Cost

EVALUATION OF THE SELECTED REMEDY

Criteria 1, 2, 3, 4, 5, 6, 7, and 8 have been achieved for soil and ground water. GMC has removed contaminated soil and debris from the site. EPA concurs that the BHHRA demonstrates that the remaining contaminant concentrations at the former Plant 2 parcel are suitable for its reuse for industrial/commercial purposes. Criterion 9 is achieved because removal activities have already occurred.

The ground water monitoring program to be implemented by GM will meet criterion 4 because purged ground water and any other wastes generated during sampling and transport will be managed in compliance with applicable State and Federal regulations.

PUBLIC PARTICIPATION

EPA is soliciting input from the community on its proposal that the former Allison Transmission Plant 2 parcel is suitable for commercial/industrial reuse. EPA has scheduled a public comment period of 45 days from , 2014 to , 2014, to encourage public participation in the decision process. The public may submit written comments, questions and requests for a public meeting to the following address:

United States Environmental Protection Agency, Region 5
Remediation and Reuse Branch (LU-9J)
77 West Jackson Boulevard
Chicago, IL 60604
Attention: Don Heller
heller.donald@epa.gov
(312) 353-1248

The administrative record is available for public review at the following two locations:

Speedway Public Library
5633 West 25th Street
Speedway, IN 46222
(317) 243-8959
www.speedway.lib.in.us/
Monday – Thursday 9:00 am – 9:00 pm
Friday – Saturday 9:00 am – 5:00 pm

and

U.S. EPA, Region 5 Records Center
77 West Jackson Boulevard
Chicago, IL
Hours
Monday – Friday: 8:00 am – 4:00 pm (Central Time)

After EPA's consideration of the public comments that are received, EPA will summarize the comments and provide a Response to Comments document. EPA will prepare the Final Decision and Response to Comments after the conclusion of the public comment period which will be included in the administrative record. Based on comments received, EPA may make changes to the proposed corrective measures which will be documented in the Final Decision and Response to Comments.